

t338_xxreal_1
(TMKrFhsGCqTrdYzHuafiiYhDtT3puubzpaM)

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Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_xxreal_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_xxreal_0 : \iota$ be given. Let $k2_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_numbers : \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(v1_xxreal_0 X0) \Rightarrow (\forall X1.(v1_xxreal_0 X1) \Rightarrow (\forall X2. \\ & (v1_xxreal_0 X2) \Rightarrow (\forall X3.(v1_xxreal_0 X3) \Rightarrow ((r1_xxreal_0 \\ & X2 X3) \Rightarrow ((r1_xxreal_0 X1 X0) \vee (k6_subset_1 (k3_xxreal_1 X0 X3) (\\ & k3_xxreal_1 X2 X1) = k2_xboole_0 (k3_xxreal_1 X0 X2) (k3_xxreal_1 \\ & X1 X3)))))))) \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0.(v1_xxreal_0 X0) \Rightarrow (\neg(X0 \in k1_numbers) \wedge (r1_xxreal_0 X0 k2_xxreal_0)) \tag{2}$$

Assume the following.

$$v1_xxreal_0 k2_xxreal_0 \tag{3}$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Leftrightarrow (X0 \in k1_numbers) \tag{4}$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (v1_xxreal_0 X0) \tag{5}$$

Theorem 1

$$\begin{aligned} & \forall X0.(v1_xxreal_0 X0) \Rightarrow (\forall X1.(v1_xxreal_0 X1) \Rightarrow (\forall X2. \\ & (v1_xxreal_0 X2) \Rightarrow ((r1_xxreal_0 X0 X1) \Rightarrow (k6_subset_1 (k3_xxreal_1 \\ & k2_xxreal_0 X1) (k3_xxreal_1 X0 X2) = k2_xboole_0 (k3_xxreal_1 \\ & k2_xxreal_0 X0) (k3_xxreal_1 X2 X1)))))) \end{aligned}$$